Work Order ID 610	JJ.	U.L	1
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Page 1

August 4, 2010 8:56:18 AM Item ID: D4150-1 Accept Setup Start **Revision ID:** Stop Item Name: Arm **Start Date:** 8/04/10 Start Qty: 10.00 **Cust Item ID:** Required Date: 8/11/10 Req'd Qty: 10.00 **Customer:** Reference: Run Start Date: 10-8-04 Tooling: **Process Plan:** Approvals: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Toól# Plan Accept Reject Reject Insp. Work Center ID Description Qty Qty Number Stamp Run Hours Code: **Draw Nbr Revision Nbr** D4150 В Cut blanks as per folio 100 0.00 Bandsaw Memo Jeaspa Bandsaw 3.950" LONG 110 0.00

HAAS 1 HAAS CNC vertical machine #1 Memo

0.00

MACHINE AS PER FOLI FA943 AND DWG

FOLIO REV: DWG REV.

**DEBURR** 

W/O:			WC	ORK ORDER CHANGI	ES			<b>,</b>
DATE	STEP	PRO	CEDURE CHA	CEDURE CHANGE			Approval Chief Eng / Prod Mgr	Approval QC Inspector
							Prod Mgr	
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQA: _	Date:	
	R	esolution:	Dispositio	n:	_ QA: N/C Clo	sed:	Date: _	
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCR	)		
DATE	0750	Description of NC	escription of NC Corrective Action Section B			Verification	n Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description  Chief Eng	Sign & Date	Section C		QC Inspector
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### Work Order ID 61011

August 4, 2010 8:56:18 AM



Page 2

Item ID:

D4150-1

Accept



Setup Start



**Revision ID:** 

**Item Name:** 

**Start Date:** 

Arm

8/04/10

**Start Qty: 10.00** Req'd Qty: 10.00



Cust Item ID:

**Customer:** 

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Tool ID

Start Run



Required Date: 8/11/10

Date:\_\_\_\_\_

SPC (Y/N):

Set Up/

Run Hours

Date:

Stop

Stop

Sequence ID/ **Work Center ID** 

120

Quality Control

Operation Description

QC2- Inspect parts off machine FAI/FAIB

0.00 0.00

Tool # Plan Accept Qty Code

Reject Qty

Reject Insp. Number Stamp

130

QC

Quality Control

QC8- Inspect parts - second check

Memo

Memo

1. 10/08/12

170

Packaging

Packaging

Memo

Identify as per dwg & Stock Location. 23

0.00

0.00

Dart Ae	rospace	<b>Ltd</b>								, ,			
W/O:			V	ORK ORDER CHANGE	ANGES								
DATE	STEP	PROCEDURE CHANGE By	PROCEDURE CHANGE				ate	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
			···										
Part No	:	PAR #:	Fault Ca	tegory:	NCR: Ye	es No	DQA		_ Date: _				
	R	esolution:	Disposit	ion:	QA: N/C	Close	ed:		Date: _	····-			
NCR:		W	ORK OR	DER NON-CONFORMAI	NCE (N	CR)							
DATE	STEP	Description of NC		Corrective Action Section		ın &	Verifica		Approval	Approval			
DAIL	JILI	Section A	Initial Chief Eng	Action Description Chief Eng		ate	Section C		Chief Eng	QC Inspector			
					;								
<b> </b>	-		1										

### Work Order ID 61011

Page 3

August 4, 2010 8:56:18 AM

Required Date: 8/11/10

Item ID:

D4150-1

Accept



Setup Start

Stop



**Revision ID:** 

**Start Date:** 

Item Name:

Arm

8/04/10

**Start Qty: 10.00** 

Operation

**Cust Item ID:** 

**Customer:** 

**Tool ID** 

Reference:

Approvals:

Process Plan:

Req'd Qty: 10.00

Date:

**Tooling:** 

Date:

Tool # Plan

Code

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Qty

Accept

Qty

Reject

Reject

Number

Insp.

Stamp

Sequence ID/

Work Center ID

180

Description

QC21- Final Inspection - Work Order Release

Memo

**Run Hours** 

Set Up/

0.00

Quality Control

0.00

Dait Ac	ospace	Liu						*			
W/O:			WORK ORDER CHANGES								
DATE	STEP	PROCEDURE C	HANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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			<u> </u>								
Part No	) <b>:</b>	PAR #: Fault C	ategory: NCF	R: Yes	No DQ	۸:	_ Date: _				
	٠Ď٠	Piones Diones	ition. OA.	NI/C C	locad:	<i>\$</i> 5,	Data:				

NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
		Description of NC		Corrective Action Section B		Verification	Annroyal	Approval			
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector			
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							. 5				

# **Picklist Print**

August 4, 2010 8:56:23 AM

Work Order ID: 61011

Parent Item: D4150-1

Parent Item Name: Arm



**Start Date:** 8/04/10

Required Date: 8/11/10

**Start Qty: 10.00** 

Required Qty: 10.00

Comments:

IPP Rev:A 10.06.24 new issue DD verf:EC□

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
]		Purchased	No	·		100	f	40.6917	0.333333	3.33333			
303 BAR .750" X 1.500"		<i>f</i>		<b>Location</b>		Loc (	<u>Oty</u>	Loc Code	3-				
			<i>~</i> ~	MAT		21	.235		_				
		Apo.	8.9		15047 🛂	21	.235		_	3.33			
				MAT53		19.45	5666		·				
				1	14968	19.45	5666						

Dart Ae	rospace L	_ta							1
W/O:			WO	RK ORDER CHANGES					
DATE	STEP	PR	OCEDURE CHAP	NGE	By Date			Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	gory:N	ICR: Yes N	lo <b>DQ</b> /	A:	Date: _	
Resolution:		solution:	Disposition: QA:			: N/C Closed:			<del>,</del>
NCR:			WORK ORDE	ER NON-CONFORMANO	CE (NCR)		·,,		-u
DATE	OTED	Description of NC		Corrective Action Section B		Verification		Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti		Chief Eng	QC Inspecto
									·
						1		1	1

DART AEROSPACE LTD	Work Order:	61011
Description: ATTACHMENT ARM ASSY.	Part Number:	D4150-1
Inspection Dwg: Rev:		Page 1 of 1

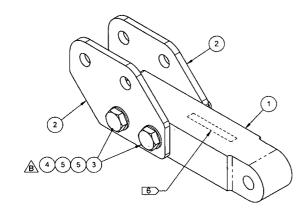
# FIRST ARTICLE INSPECTION CHECKLIST

Drawing		Actual			Method of	Comments
Dimension	Tolerance	Dimension	Accept	Reject	Inspection	Comments
3.74	11030	3.747			Vernier	
. 825	1.010 - 0.0	.830			. 10	
-700	11010	. 705	سنر		1,	
2.907	+/010	2.908			11	
1.06	+/030	2.06	,		RAD GAGE	
.063	+1- 0100	. 063			Vernies	
. 400		. 400			u	
,800	11010	. 800			"	
.1910	1.00500	.191			ι,	
1.38	1/030	- 38			RAD GAGE	
. 75	1030	. 740			Vernier.	
. 375	+1010	. 375			1/	
3.369	+/010	3.369			"	
. 266 0	+.006001	. 269			11	
	·					
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	·		-	<del></del>		
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				<del> </del>		
				<del> </del>		
		<u> </u>	<u></u>	<u></u>		

Measured by:	Audited by:	Preliminary Approval:
Date: 10 8 9	Date: 19/08/12	Date:

			Revised by A	pproved
ſ	Rev	Date	Change	1.0
Ì	E	10.04.14	Added preliminary approval	

QTY -041 ITEM P/N DESCRIPTION X D4150-041 ATTACHMENT ARM ASSY D4150-1 ARM D4150-3 ARM PLATE 2 AN3C13A BOLT 1 ... MS21043-3 NUT-2 NAS1149C0332R WASHER



**D4150-041 ATTACHMENT ARM ASSY** 

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT 

RELEASED 2010 -07- 1 6

REPLACED QTY(3) MS20615-4M20 WITH QTY(2) EACH ANSC13A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (2N D3-1); 00,1912 PL REPLACES Ø0,129 3 PL (2N D5-2; D4-3 & B5-3), REASON: SEE TR-D350-507-2 REV, B. 10,07.08 MB NEW ISSUE Α 10.06.18 MB REV. DESCRIPTION BY DATE DESIGN DART AEROSPACE LTD DRAWN HAWKESBURY, ONTARIO, CANADA CHECKED DRAWING NO. REV. 8 D4150 MFG. APPR. SHEET 1 OF 3 APPROVED TITLE SCALE ATTACHMENT ARM ASSY DE APPR. NTS DATE COPYRIGHT © 2010 BY DART AEROSPACE LTD
THIS COCUMENT IS PRIVATE AND COMPRETING AND IS SUPPLIED ON THE EXPRESS CONDITION TO BE USED FOR ANY PURPOSE OF COPIED ON COMMUNICATED TO ANY OTHER PERSONS. 10.07.08

NOTES: 1) MATERIAL: N/A

D

2) FINISH: NONE 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

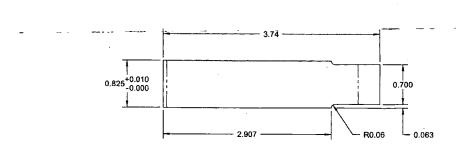
4) UNITS: INCHES UNLESS OTHERWISE NOTED

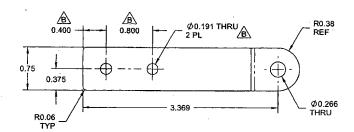
5) BREAK SHARP EDGES: N/A

6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4150-041" USING FINE POINT PERMANENT INK MARKER 7) WEIGHT: 0.82 lbs

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W/O:			W	ORK ORDER CHANGE	S				•
DATE	STEP	PROC	EDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	•	PAR #:	_ Fault Ca	tegory:	NCR: Yes	No DQ	A:	Date: _	
	R	esolution:	_ Disposit	ion:	QA: N/C C	losed:		Date: _	
NCR:		W	ORK ORI	DER NON-CONFORMA	NCE (NC	R)			
		Description of NC	f NC Corrective Action Sec			Verifi	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	Section C		Chief Eng	QC Inspector
l									
						-			
•									





D4150-1 ARM

W6 61011

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NOTES:
1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
REF DART SPEC M304B OR M303B
2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.60 lbs

8

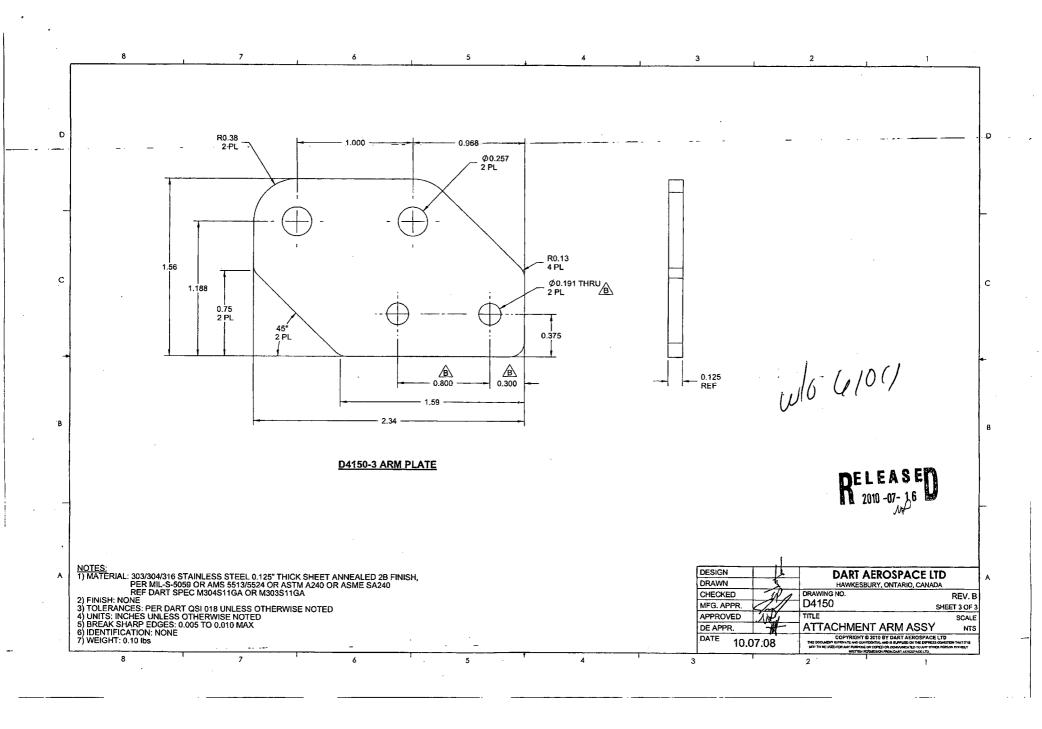
DESIGN		DART AEROSPACE L	TD				
DRAWN	1	HAWKESBURY, ONTARIO, CANADA					
CHECKED	021	DRAWING NO.	REV. B				
MFG. APPR.	(22)	D4150	SHEET 2 OF 3				
APPROVED	TW.	TITLE	SCALE				
DE APPR.	-//	ATTACHMENT ARM ASSY	NTS				
DATE 10.0	7:08 -	COPYRIGHT © 2010 BY DART AEROSPACE LTD  THIS DOCUMENT OF PROMIT AND COPYRIGHT ON THE COPYRIS DOCUMENT HALT IT IS  MOTTO BY USED FOR ANY PROPOSE OF COPIE ON CONCURSIONED TO JUNY OTHER PROPOSE OF COPIE ON CONCURSIONED TO JUNY OTHER PROPOSE OF COPIE ON CONCURSIONED TO JUNY OTHER PROPOSE OF COPIE OF COPIE OF CONCURSIONED TO JUNY OTHER PROPOSE OF COPIE OF COPI					

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W/O:		WORK ORDER	CHANGES				•
DATE STEP	PR	OCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:			Date: _	
Resolution	<b>:</b>	Disposition:		QA: N/C Closed:			

NCR: WORK ORDER NON-CONFORMANCE (NCR)									
DATE ST		Description of NC	Corrective Action Section B			Verification	Annual	A	
	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approva QC Inspecto	



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W/O:			WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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Part No	:	PAR #:	Fault Categ	ory:	NCR: Yes	No <b>DQ</b>	<b>A</b> :	Date:		
				QA: N/C Closed: Date:						
NCR:		· · ·	WORK ORDE	R NON-CONFORMA	NCE (NC	R)		,		
	STEP	Description of NC Section A	Corrective Action Section			Verifi	Verification	Approval	Approval	
DATE			Initial Chief Eng	Action Description Chief Eng	Sign Date	& Sect	Section C	Chief Eng	QC Inspector	
						,				